

IHC/SS

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MEMORANDUM FOR: Executive Secretary, IHC

SUBJECT: Annual Report on Intelligence  
Information Handling

REFERENCE: IHC-D-130/7, dated 4 April 1972,  
same subject

Attached is CIA's contribution to AR-5 as requested  
in reference memorandum. Contributions to Annex A,  
Inventory of Community Information Handling Systems,  
were transmitted separately.

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CIA Member

Intelligence Information Handling Committee

Attachment: (4 copies)  
CIA Contribution to  
IHC Annual Report

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**SECRET**

## CHAPTER II

### HIGHLIGHTS OF REPORTING PERIOD

1. CIA has installed and tested terminal equipment to be used in  
the [redacted]

2. The CIA Automated Communications Terminal (ACT I) system  
will soon be operational (Chapter II).

3. NPIC is publishing a manual to assist users of the National Base  
of Imagery-Derived Data (NBIDI) (Chapter IV).

4. CIA is developing two security related management systems to  
enhance security [redacted] processing and badge control (Chapter IV).

5. CIA's Central Reference Service has several developmental/trial  
efforts underway to improve its automated processing capabilities  
(Chapter VIII).

6. CIA is developing the Picture Enhancement Computer Operating  
System (PECOS) with contractual assistance.

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## CHAPTER IV

### MANAGEMENT OF, AND REQUIREMENTS FOR, THE COMMUNITY INFORMATION HANDLING SYSTEM

1. The National Photographic Interpretation Center (NPIC) is publishing a detailed manual on the Installations Data File for use by Community service centers. The service centers, established by COMIREX under the National Tasking Plan, are provided by NPIC with data on magnetic tape from the National Base of Imagery-Derived Information (NBIDI). The manual will assist the service centers in utilizing the magnetic tape to service customers.

2. The Exploitation Products Data File (EPDF), also maintained by NPIC under the National Tasking Plan, will be available to NPIC on-line users in July 1972. The NBIDI service centers will be provided with magnetic tape copies of the file. The EPDF is an index to documents received from U.S. [redacted]

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The file will include abstracts produced as a result of the Third-Phase Basic Reporting Program and also key identifiers which will make the file a more useful information source.

3. CIA's Office of Security and the Support Information Processing Systems Task Force are developing two security-related management systems. The Case Processing and Evaluation Reports (CAPER-OS) system is designed to provide more timely, accurate control over

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The Central Badging (CENBAD)

system will be an on-line record system to maintain control over the badges and security credentials issued by the Agency.

4. CIA's Office of Computer Services has developed a sophisticated cost accounting system for third generation computers. The system will be used to inform users of the cost of each project as a way of stimulating cost/benefit decisions.

5. The Machine Assisted Dissemination (MAD) system developed by the Central Reference Service, CIA, has become operational. This system processes approximately 35,000 electrically received messages a month. Forty-five percent of the messages are disseminated automatically; the remainder involve some human assistance by an operator working at a cathode ray tube console.

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three hours a day. A number of Central Reference Service personnel have been trained as query specialists. These individuals are making 250-300 queries a month on behalf of production analysts. Primary interest

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## CHAPTER VIII

### DEVELOPMENT OF EXPERIMENTAL/TRIAL INFORMATION HANDLING SERVICES AND RESEARCH AND DEVELOPMENT

1. CIA's Central Reference Service has several developmental efforts underway aimed at improving its processing capabilities and service utilizing automated techniques.

a. A study of computer text searching systems has been initiated. The purpose of this study is to develop a system to supplement or replace the capabilities of the Rapid Search Machine (also known as GESCAN). Six systems are being examined that represent extant text processing techniques. CRS has provided commercial and academic sponsors of these systems with unclassified textual data on magnetic tape and a standard query set for testing purposes. Promising systems will be brought in-house and will be subjected to further tests using live data.

b. During the development of the Machine Assisted Dissemination (MAD) system, it became apparent that there were significant potential benefits in retaining

messages in electrical form for storage and retrieval processing following dissemination processing. In fact, the same software utilized for dissemination is also applicable to other processing functions. This has led to a MAD follow-on project encompassing the whole range of information processing functions, e.g., storage and retrieval of digital information, data extraction, on-line message analysis for indexing purposes, and microfilm storage utilizing computer output microfilm (COM) techniques.

c. In concert with the MAD follow-on project, a task team has been formed to design an interactive on-line system to replace the AEGIS batch processing bibliographic retrieval system. Special attention will be devoted to providing capabilities for: (1) on-line indexing of hard copy and electrically received messages, and (2) direct user (Agency and Community) interaction with the system for input, query, and output.

2. The Office of Research and Development (ORD), CIA, is developing, with contractual assistance, the Picture Enhancement Computer Operating System (PECOS). Image enhancement involves converting photography into digital representation, manipulating the digital data in a computer

in order to enhance degraded or poorly delineated features, and converting the digital data back into an improved photograph. The system, when developed, will allow an analyst, without computer experience, to utilize a variety of image processing techniques. PECOS is a generalized system that can incorporate image processing routines that have been developed by and for other organizations.

3. An experimental text searching system is under development in CIA, ORD. The key features of this system are that it utilizes a minicomputer, and it searches at near hardware operating speeds. Thus, it offers the potential for a very fast, inexpensive system.